

Auto industry races to make ventilators

● Repurposing car factories for emergency production has drawn comparisons to World War II

● In Spain, Volkswagen's Seat brand has switched to producing ventilators

● Mercedes has asked its Formula 1 team to get to work

AFP | Paris

The automotive industry is offering its expertise and manpower to the hospital sector as it gears up to build mechanical ventilators during the coronavirus pandemic, an initiative that is being met with some scepticism.

American auto manufacturers General Motors and Ford, French car companies PSA and Renault, Germany's Volkswagen group and Formula 1 engineers have joined the ranks in response to a massive global shortage of the vital piece of medical equipment.

As hospitals around the world face a surge of patients with breathing difficulties from COVID-19, the scarcity of ventilators has forced doctors to make life-or-death decisions.

Repurposing car factories for emergency production has drawn comparisons to World War II, when they were used to build tanks and fighter planes.

But some experts say that in this situation, building critical care ventilators will require different techniques and procedures from what a car factory normally sees.

US President Donald Trump



Mechanical ventilators needed to treat those suffering from respiratory distress due to COVID-19 are in short supply



A mechanical ventilator being developed by Spanish automobile manufacturer SEAT at the company's Martorell factory using a windscreen wiper motor



Mechanical engineers, doctors and the Mercedes Formula 1 team in conjunction with University College London have adapted a device used to help people who have trouble breathing while sleeping to help COVID-19 patients

used wartime economy analogies to justify his appeal to the automobile industry as the country grapples with a mounting number of coronavirus cases. He ultimately used a 1950s law concerning defence production to force one of GM's plants to make ventilators.

In France, meanwhile, a consortium of industrial companies has been created -- including PSA and automotive equipment supplier Valeo -- to manufacture "10,000 ventilators by mid-May", President Emmanuel Macron announced Tuesday.

In Spain, Volkswagen's Seat brand has switched to producing ventilators at its Martorell plant near Barcelona.

The proposed model, which uses the adapted motor of a windscreen wiper, is already undergoing testing with the hopes of gaining formal approval from health authorities, Seat said in a statement.

For its part, Mercedes has asked its Formula 1 team, which was idle due to postponed or cancelled Grand Prix races, to get to work.

The six-time world champion team built a less-invasive respiratory device in order to reserve ventilators -- which require breathing tubes and sedation -- for the most severely affected patients.

The team says it could manufacture some 1,000 units a day with the help of six other UK-based F1 teams which have committed to help build the devices.

A version of the device -- which increases air and oxygen flow into the lungs and is often used to treat sleep apnea -- has already been used in hospitals in Italy and China to help COVID-19 patients.

The "Project Pitlane" mission takes advantage of "the core skills of the F1 industry: rapid design, prototype manufacture, test and skilled assembly," For-

mula 1 said in a statement.

Dependent on suppliers

Some look sceptically on the car industry's entry into the world of medical equipment, however.

The Bulletin of the Atomic Scientists, a non-profit organisation founded after the creation of the atomic bomb and which is known for its symbolic "Doomsday Clock", said in a recent article that car manufacturers are not best placed for assembling medical equipment.

"Ventilators might resemble the pumps and air conditioners used in automobiles, but few automakers build their own -- they buy them from specialised producers," the group pointed out.

While carmakers have under-utilised production capacity at the moment, they are still dependent on suppliers who are often overseas, at a moment when supply chains have nearly ground to a halt, it said in its report.

"Facile images of Ford assembly lines building World War II bombers can only get us so far in solving the ventilator problems of today," the group said.

But car manufacturers say they are up to the task.

Renault has put its "techno-centre" outside of Paris, its largest research and development centre in France, to work on developing a prototype using state-of-the-art equipment such as 3D printers

In the world race to get ahead of the coronavirus, time is of the essence.

For Formula 1 and University College London engineers, "it took fewer than 100 hours from the initial meeting to production of the first device," the team said.

This may be a typical lead time in motor racing, but not necessarily in other industries.

Pirelli CEO slams brakes on talk of Brembo merger

Reuters | Milan

The head of Pirelli said there were no plans to merge with Brembo BRMBL. MI after the brakes maker bought a small stake in the Italian tyre maker, downplaying speculation on Wednesday of a tie-up between the two Italian auto brands.

Russia, Saudi not holding oil talks at the moment - Kremlin

Reuters | Moscow

Russia and Saudi Arabia are not holding talks regarding the oil market at the moment and Russian President Vladimir Putin has no immediate plans to have a phone call with Saudi leadership, Kremlin spokesman Dmitry Peskov said yesterday.

Such talks could be set up quickly if necessary, Peskov said in a statement yesterday.

Carrefour teams up with Uber Eats for lockdown deliveries

Reuters | Paris

French supermarket retailer Carrefour and Uber Eats said yesterday they would launch a new delivery service aimed at helping Parisians buy essential goods and food during the nationwide lockdown triggered by the coronavirus crisis.

German plexiglass firm churns out virus shields

Wiesbaden | Germany

Touted as a simple but effective shield against coronavirus infections, transparent screens have sprung up at supermarket tills and pharmacies across Germany. For plexiglass manufacturer Claus Mueller, business has never been better -- but no one is celebrating.

The Plexiglas Riesner processing plant in Wiesbaden is abuzz with activity as owner Mueller and his workers race to get out the next batch of orders, cutting and bending acrylic sheets to size while the phone rings off the hook.

It's the busiest time in the small company's 114-year history, with requests coming in faster than the supply chain can handle.

"We have endless work but the reason is very sad, so we can't be euphoric about it," Mueller tells AFP.

Demand for "sneeze guards" has surged as companies scramble to protect employees from a deadly virus that is transmitted through droplets from an infected person's mouth or nose, putting at risk those whose jobs don't allow them to keep the recommended two-metre (six-foot) distance.

"It's the sensible thing to do if



Workers cut and bend each piece of the clear plastic into the shape needed

close contact can't be avoided," says Mueller.

In the space of mere weeks, German shoppers have become used to the sight of plexiglass barriers separating them from cashiers in grocery stores, among the few retailers that remain open.

Elsewhere too, supermarket chains are opting for the relatively affordable and easy to install screens, from Carrefour

in France to Walmart in the United States.

Mueller says his sales have doubled in March compared with pre-virus times, boosted by business from hospitals, pharmacies, hotels, banks, and doctors' offices.

The company is also working on a large order destined for local Aldi supermarkets, with the jovial Mueller regularly rolling up his sleeves to pitch in

with the three employees on the workshop floor.

Running low

But he is fast running out of stock, and estimates he only has enough to keep going for another week or two.

"It seems the whole market in Germany is coming to a standstill," Mueller says.

While plexiglass is often used as shorthand for any acryl-

ic sheets, Mueller points out that the high-quality Plexiglas (spelled with a single "s") that he mostly works with is a registered trademark.

And his Plexiglas wholesaler has warned that deliveries of raw materials are grinding to a halt as the virus disrupts global production lines, with many factories shutting down or putting workers on reduced hours.

"We're not expecting new deliveries until early May," Mueller says.

April will likely be spent filling regular orders for long-time industrial customers.

"After earning double in one month, the pressure is off and we can get by for a bit," Mueller says, declining to give numbers. "We won't go bust, unlike many other companies," he sighs, expressing concern for a friend whose snack bar has been hit hard by Germany's lockdown measures.

According to research firm 360 Market Updates, the global market for acrylic sheets was worth \$5.3 billion (4.8 billion euros) in 2019 and is forecast to grow to \$7.1 billion by 2024.

'Feel safer'

The Plexiglas Riesner company started out as a family glass-cutting business before

founder Karl Riesner's son switched to cheaper and easier to manipulate plexiglass in 1957.

Mueller took over the firm in 2004 after stumbling across it on a government website that connects entrepreneurs with small and medium-size "Mittelstand" companies, considered the backbone of Europe's top economy, in need of successors.

"I ran the numbers and knew I could make it work," he recalls.

Looking past the coronavirus crisis, Mueller expects demand for plexiglass from food retailers will drop off, and predicts that many will eventually remove the screens.

But he can see plexiglass becoming a fixture in pharmacies and doctors' reception areas.

One of his customers, pharmacist Iris Erdelmeier, says she feels more comfortable working behind the plastic safeguard while the pandemic rages, with plexiglass dividers installed at all three of her pharmacy's tills.

"We feel much safer with the protective screens. They also protect our patients in case we ourselves were to be infected without showing symptoms," she says.

"Customers have actually told us they like the screens, and have suggested we keep them permanently."